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**REMARKS**

- Claims 1 to 33 remain pending
- Claims 1, 9, 13, 15, 18, and 21 to 33 are independent
- Claims 1 and 23 through 33 have been amended herein, no new matter has been added

**ALLOWABLE CLAIMS**

Applicants appreciate the Examiner's indication that Claims 2 to 8, 10 to 12, 14, 16, and 17 would be allowable if written in independent form including all features of the base claim and any intervening claims. However, Applicants decline to do so at this time because Applicants believe that the base claims are allowable as explained below.

**SECTION 112 REJECTIONS**

Claims 1 to 8 and 23 to 33 stand rejected under 35 U.S.C. Section 112, paragraph 2, as indefinite for various reasons described below.

(a) With regard to Claims 1 and 23 to 33, the Examiner asserts that the term "weighted fair queuing" requires an antecedent basis. Applicants do not agree, however solely to expedite prosecution Applicants have amended Claims 1 and 23 to 33 to recite "a weighted fair queuing" as suggested by the Examiner. Therefore, as amended, Claims 1 and 23 to 33 overcome the Examiner's rejection. Thus, Applicants respectfully request withdrawal of this Section 112 rejection of Claims 1 to 8 and 23 to 33.

(b) With regard to Claims 28 to 33, the Examiner asserts that the use of the term "adapted to" is not clear and the Examiner appears to require the term not be used. Applicants respectfully traverse this rejection. The Examiner is respectfully reminded that the use of functional language to

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define an invention is perfectly acceptable as specifically indicated in the MPEP:

A functional limitation is an attempt to define something by what it does, rather than by what it is (e.g., as evidenced by its specific structure or specific ingredients). There is nothing inherently wrong with defining some part of an invention in functional terms. Functional language does not, in and of itself, render a claim improper. In re Swinehart, 439 F.2d 210, 169 USPQ 226 (CCPA 1971).

A functional limitation must be evaluated and considered, just like any other limitation of the claim, for what it fairly conveys to a person of ordinary skill in the pertinent art in the context in which it is used. A functional limitation is often used in association with an element, ingredient, or step of a process to define a particular capability or purpose that is served by the recited element, ingredient or step. In Innova/Pure Water Inc. v. Safari Water Filtration Sys. Inc., 381 F.3d 1111, 1117-20, 72 USPQ2d 1001, 1006-08 (Fed. Cir. 2004), the court noted that the claim term "operatively connected" is "a general descriptive claim term frequently used in patent drafting to reflect a functional relationship between claimed components," that is, the term "means the claimed components must be connected in a way to perform a designated function." "In the absence of modifiers, general descriptive terms are typically construed as having their full meaning." Id. at 1118, 72 USPQ2d at 1006. In the patent claim at issue, "subject to any clear and unmistakable disavowal of claim scope, the term 'operatively connected' takes the full breath of its ordinary meaning, i.e., 'said tube [is] operatively connected to said cap' when the tube and cap are arranged in a manner capable of performing the function of filtering." Id. at 1120, 72 USPQ2d at 1008. . . .

In a claim that was directed to a kit of component parts capable of being assembled, the Court held that limitations such as "members **adapted to** be positioned" and "portions . . . being resiliently dilatible whereby said housing may be slidably positioned" serve to precisely define present structural attributes of interrelated component parts of the claimed assembly. In re Venezia, 530 F.2d 956, 189 USPQ 149 (CCPA 1976). MPEP Section 2173.05(g) (emphasis added)

Thus, Applicants assert that the term "adapted to" is clear and has the plain English meaning that the MPEP and the case law

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cited therein ascribes to it. Therefore, Applicants respectfully request that the Examiner withdraw this Section 112 rejection of Claims 28 to 33.

(c) With regard to Claims 1 and 23 to 27, the Examiner asserts that the Claims are indefinite because "it is not clear if claims 1, and 23-27 are apparatus or a method." However, the preamble of Claims 1 and 23 to 27 clearly specify that these claims are each directed toward a "scheduler" which is an apparatus clearly described and depicted, for example, in Figs. 7A and 7B and related text of Applicants' specification. Thus, Applicants respectfully traverse the Examiner's rejection on the grounds that the rejected claims are clearly apparatus claims. The claims do not set forth any steps (as the Examiner notes). This is because the claims are not method claims. Therefore, Applicants respectfully request that the Examiner withdraw this Section 112 rejection of Claims 1 and 23 to 27.

#### SECTION 101 REJECTIONS

Claims 9 to 27 stand rejected under 35 U.S.C. Section 101 as being directed to non-statutory subject matter. The Examiner asserts that adjusting or determining a scaling factor amounts to nothing more than "data gathering and [a] sequence of mathematical operations without being limited to a practical application." Applicants respectfully traverse the Examiner's Section 101 rejection. The claimed scaling factor of a scheduler is representative of a tangible, real world, physical characteristic of a scheduler and, as described in detail in Applicants' specification, adjusting the scaling factor clearly has a practical application in the use of a scheduler. For these two reasons, Applicants' Claims 9 to 27 recite statutory subject matter.

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The scaling factor of a scheduler defines the range over which memory slots are chosen for distributing frames within a queue. (See e.g., Applicants' specification, pg. 6, ln 30 to pg. 7, ln 10) Clearly, slots within a queue are tangible, real world, physical objects. The scaling factor represents a range or subset of these slots within the queue. Thus, the scaling factor is representative of a tangible, real world, physical object. This scaling factor or range is expressed in a form that allows the scaling factor to be used to compute an enqueue distance from a current slot (i.e., a slot where a frame will be placed). Thus, Applicants' inventive method is more than a mere abstract calculation and the scaling factor represents more than an abstraction. A physical location (e.g., a slot) within a memory chip functioning as a queue is being identified for storage of an incoming frame from among a range of slots where the particular range of slots that will be considered is specified by the scaling factor.

Further, even if the scaling factor is considered not representative of a tangible, real world, physical object, the inventive methods recited in Claims 9 to 27 clearly have a practical application. As described in Applicants' specification, by adjusting the scaling factor based on the arriving frames (as claimed), error conditions and/or under utilization of queue resources are avoided. (See e.g., pg. 14, lns 14 to 25) Thus, the invention as claimed is limited to a practical application of, e.g., avoiding errors in scheduler queues. Therefore, for at least the above two reasons, Applicants respectfully request that the Examiner withdraw the Section 101 rejection of Claims 9 to 27.

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**CONCLUSION**

The Applicants believe all the claims to be in condition for allowance, and respectfully request withdrawal of the objections and issuance of a Notice of Allowance.

Applicants do not believe any fees are due in conjunction with this amendment. However, if an Extension of Time is required to make this response timely, please accept this sentence as such a request and charge Deposit Account No. 04-1696 the requisite fee. Applicants do not believe any other fees are due regarding this amendment. If any other fees are required, however, please charge Deposit Account No. 04-1696. The Applicant encourages the Examiner to telephone Applicant's attorney should any issues remain.

Respectfully Submitted,



Steven M. Santisi, Esq.  
Registration No. 40,157  
Dugan & Dugan, PC  
Attorneys for Applicants  
(914) 332-9081

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